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# INSIGHTS INTO HIV KNOWLEDGE AMONG RED CROSS YOUTH MEMBERS: A DESCRIPTIVE STUDY

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#### **ABSTRACT**

The Red Cross Youth as a school health cadre has various tasks, one of which is to minimize risky behavior in teenagers. Adolescents have the potential to contract HIV if they do not have good knowledge. This potential is increasing, especially in tourist areas such as Pangandaran. The aim of this research was to determine the level of knowledge of RCY members about HIV in Pangandaran Regency. This research uses a quantitative descriptive research method with a cross-sectional approach. The population in this study was all 120 members of RCY SMAN 1 Parigi, Pangandaran Regency. The sampling method used is saturated sampling. The instrument used was HIV-KQ (HIV Knowledge Questionnaire) 18. This research used a questionnaire in the form of Google Formulir. The data analysis technique used is categorical univariate analysis. The research results showed that 40.8% of respondents had high knowledge level, 37.5% had moderate level of knowledge, and 21.7% had low level of knowledge. These results were influenced by the routine provision of material from RCY supervisors and also external parties such as community health centers that held outreaches about HIV.

Keywords: HIV; knowledge; level; RCY

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## **INTRODUCTION**

The development of the Human Immunodeficiency Virus (HIV) epidemic has become a global health problem, including in Indonesia. HIV is a condition where a person's immune system is weakened, making it easier for infections to occur (WHO, 2023). HIV is caused by direct contact between tissues or mucous membranes with the body fluids of HIV sufferers through sexual activity, the use of the same needle, and through HIV-positive mothers who are pregnant with their babies. The initial symptoms that appear are usually flu for several days or even weeks (CDC, 2022). The Indonesian Ministry of Health (Kemenkes) released the latest data on people living with HIV in Indonesia, as of June 2022, the total number of people living with HIV spread across all provinces reached 519,158 people. The data shows that around 51% of new HIV cases detected are suffered by adolescents. West Java is ranked second in Indonesia with 151,832 cases of people living with HIV in 2022. (Kemenkes, 2022). Based on data collected at the Pangandaran District Health Office, in July 2022 a total of 115 HIV patients. Twelve of them were found at the Parigi sub-district health center (Arsyad, 2020).

Pangandaran Regency as one of the regencies in West Java has various natural tourist destinations such as beaches and waterfalls. The development of tourism potential in the region is in line with the emergence of accompanying negative phenomena, such as the

potential for increased spread of the HIV through the arrival of foreign and domestic tourists. Tourism areas are often the location of prostitution practices for both men and women, which is a means of spreading HIV and drug transactions (Marsiglia et al., 2015). The World Health Organization (WHO) states that 50% of all infected cases are adolescents (aged 15 to 24 years). The majority do not know if they have HIV, and only some adolescents who engage in sex know if their partners have HIV or not (WHO, 2023). Based on data from the Indonesian Demographic and Health Survey (SDKI, 2017) based on data from the Indonesian Demographic and Health Survey (SDKI, 2017), one of the factors that are thought to trigger an increase in the number of HIV sufferers is the incomprehension and ignorance of Indonesian adolescents about HIV.

The ignorance of adolescents related to HIV is reflected in their level of knowledge. A study of one of the schools in Pangandaran Regency stated (71.6%) of adolescents had insufficient knowledge, and (54.7%) of adolescents had a bad attitude toward HIV transmission behavior (Yani et al., 2022). Based on the preliminary of to the Counseling Guidance teacher as well, at SMAN 1 Parigi about 50% of students have premarital sex. Deviations from free sexual behavior must be avoided by adolescents, one of which is by providing knowledge to adolescents. Knowledge can increase a person's awareness and understanding which can affect adolescent decision making. Knowledge in adolescents plays an important role in shaping attitudes toward efforts to prevent HIV transmission by avoiding risky behavior. (Prabasari et al., 2019).

Based on research by Kumalasary (2021) adolescents get knowledge related to HIV/AIDS, and the majority of sources are from schools 76.67%. The role of schools in preventing the spread of HIV, drugs, and reproductive health is to form intra-school organizations that aim to minimize risky behavior among adolescents by providing correct information about drugs, RH, HIV and providing information and counseling services for students through peer educators. (Nurvitasari et al., 2017). The Red Cross Youth (RCY) at SMAN 1 Parigi is a general health cadre. RCY acts as a cadre of promotive and preventive health of school adolescents which also discusses HIV. RCY has a role and function as a peer educator, namely peer educators regarding healthy living skills and maintaining environmental health (PMI, 2023). To carry out the role and function of RCY in peer educators and maintain environmental health regarding HIV, RCY members must have a good level of knowledge about HIV. This study aims to fill the knowledge gap in the field of knowledge level in RCY members about HIV which has not been widely explored, so the purpose of this study is to determine the level of knowledge about HIV in RCY members of SMAN 1 Parigi Pangandaran Regency.

#### **METHOD**

The design of this study was descriptive quantitative with a cross-sectional approach to assess the level of knowledge about HIV in RCY members of SMAN 1 Parigi. This study has received a research ethics permission from the Research Ethics Commission of Universitas Padjadjaran with ethical number 1461/UN6.KEP/EC/2023. The variable in this study was knowledge about HIV. According to Notoatmodjo (2018), knowledge is the result of knowing, and this occurs after people perceive a certain object. The population in this study were members of RCY SMAN 1 Parigi Pangandaran Regency, totaling 120 members. This data was taken in December 2023. The sample used in this study was to use the saturated sampling technique also known as total sampling or census so that all 120 members were included. The instrument used was the HIV Knowledge Questionnaire (HIV-KQ 18) instrument specifically made to measure the level of knowledge about HIV compiled by

Carey & Schroder (2008) in English, then translated into Indonesian by (Arifin et al., 2022). The HIV-KQ contains 18 questions measured using a Guttman scale where 1 (true) and 0 (false). The results of the HIV-KQ-18 validity test obtained an r-xy value of 0.177-.564, greater than the r-table (0.112), and the HIV-KQ-18 instrument showed high-reliability test results KR 20 value of 0.763. (M. D. Kurniawan et al., 2022). The instrument was made using Google Formulir and then distributed through the WhatsApp group of RCY members. The data analysis used in this research is categorical univariate data analysis which aims to describe variables according to the data obtained. Demographic data and level of knowledge were analyzed univariately and the results were presented in the form of a frequency distribution in the form of a table. The results of the filling obtained were then summed up and analyzed univariately with Microsoft Excel and IBM Statistic applications. The category of low knowledge level is the score < 6, moderate knowledge level with a score of 6 < X < 12, and high knowledge level with a score > 12.

### **RESULTS**

Table 1.
Respondent characteristics (n=120)

Respondent characteristics	Respondent characteristics (n=120)				
Grade 10         60         50           Grade 11         36         30           Grade 12         24         20           Major             Natural Sciences         83         69.2           Social Sciences         37         30.8           Age             10-13 Years         0         0           14-17 Years         101         84.2           18-21 Years         19         15.8           Gender             Male         26         21.7           Female         94         78.3           Address             Parigi         63         52.5           Cijulang         26         21.7           Cimerak         13         10.8           Cigugur         4         3.3           Langkaplancar         5         4.2           Padaherang         1         8           Pangandaran         4         3.3           Sidamulih         4         3.3           Mangunjaya         0         0           Ves         68	Respondent characteristics	f	%		
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Parigi       63       52.5         Cijulang       26       21.7         Cimerak       13       10.8         Cigugur       4       3.3         Langkaplancar       5       4.2         Padaherang       1       8         Pangandaran       4       3.3         Sidamulih       4       3.3         Mangunjaya       0       0         Kalipucang       0       0         Having a girlfriend/boyfriend       7es       68       56.7         No       52       43.3         Ever attended HIV socialization       7es       23       19.2         No       97       80.8         HIV Information Media       20       16.7         Teacher/coach       64       53.3         Social Media       20       16.7         Television       13       10.8         Health Officer       14       11.7         Close Friends       9       7.5	Female	94	78.3		
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Having a girlfriend/boyfriend         Yes       68       56.7         No       52       43.3         Ever attended HIV socialization       Test and the social	Mangunjaya	0	0		
Yes       68       56.7         No       52       43.3         Ever attended HIV socialization       19.2         Yes       23       19.2         No       97       80.8         HIV Information Media       53.3         Teacher/coach       64       53.3         Social Media       20       16.7         Television       13       10.8         Health Officer       14       11.7         Close Friends       9       7.5	Kalipucang	0	0		
No     52     43.3       Ever attended HIV socialization     19.2       Yes     23     19.2       No     97     80.8       HIV Information Media     53.3       Teacher/coach     64     53.3       Social Media     20     16.7       Television     13     10.8       Health Officer     14     11.7       Close Friends     9     7.5	Having a girlfriend/boyfriend				
Ever attended HIV socialization       23       19.2         No       97       80.8         HIV Information Media       30       53.3         Teacher/coach       64       53.3         Social Media       20       16.7         Television       13       10.8         Health Officer       14       11.7         Close Friends       9       7.5	Yes	68	56.7		
Yes       23       19.2         No       97       80.8         HIV Information Media         Teacher/coach       64       53.3         Social Media       20       16.7         Television       13       10.8         Health Officer       14       11.7         Close Friends       9       7.5	No	52	43.3		
No         97         80.8           HIV Information Media         Teacher/coach         64         53.3           Social Media         20         16.7           Television         13         10.8           Health Officer         14         11.7           Close Friends         9         7.5	Ever attended HIV socialization				
HIV Information Media         Teacher/coach       64       53.3         Social Media       20       16.7         Television       13       10.8         Health Officer       14       11.7         Close Friends       9       7.5	Yes	23	19.2		
Teacher/coach       64       53.3         Social Media       20       16.7         Television       13       10.8         Health Officer       14       11.7         Close Friends       9       7.5	No	97	80.8		
Social Media       20       16.7         Television       13       10.8         Health Officer       14       11.7         Close Friends       9       7.5	HIV Information Media				
Television       13       10.8         Health Officer       14       11.7         Close Friends       9       7.5	Teacher/coach	64	53.3		
Health Officer1411.7Close Friends97.5	Social Media	20	16.7		
Close Friends 9 7.5	Television	13	10.8		
	Health Officer	14	11.7		
Newspapers/Magazines 0 0	Close Friends	9	7.5		
	Newspapers/Magazines	0	0		

According to table 1, the characteristics of respondents based on class, the majority were in grade 10 as much as 50%. The distribution of school majors is the highest frequency of Natural Science majors as much as 69.2%. Respondents were mostly in the age range of 14-17 as much as 84.2%. The majority of RCY members are female, 78.3%. There were 8 sub-districts involved in the study. The majority of respondents came from Parigi Sub-district as many as 63 students (52.5%) this is by the school address which is also in Parigi Sub-district. More than half of the RCY members of SMAN 1 Parigi had close girlfriend/boyfriend 56.7%. The majority of respondents have never attended socialization or counseling related to HIV as much as 80.8%. Most RCY members received information about HIV from teachers or RCY coaches 53.3%.

Table 1.
Respondent's Knowledge Level (n=120)

Respondent characteristics	f	%
High	49	40.8
Moderate	45	37.5
Low	26	21.7

Table 2, the level of knowledge about HIV among RCY members of SMAN 1 Parigi Pangandaran Regency, 40.8% of respondents have high knowledge and 37.5% have moderate knowledge

### **DISCUSSION**

Based on the results of the study, most of the respondents came from new students or grade 10. In research by Denault & Guay (2017) stated that the motivation of new students to join an organization is mostly influenced by intrinsic factors. The desire to join groups in to be more accepted and have peers join organizations to explore interests, and the desire to build skills and leadership are the motivations of new students in joining organizations. Building leadership in adolescents will increase self-esteem in adolescents. Social support is one of the strong protective factors and plays an important role in improving low self-esteem in adolescents. (Kurniawan et al., 2022). Grades 10 and 11 are also active members of RCY. While the 12th grade has become a passive member, so many of the 12th grade have resigned from the RCY organization. Most RCY members come from science majors. The science curriculum, which includes discussions related to health, is the main focus of RCY activities. This tendency can motivate students who come from natural science majors to join the RCY organization to increase learning opportunities and develop skills (Mentari et al., 2018).

More than half of the RCY members are female. This is due to gender perceptions that care, empathy and concern, are female characteristics. Cultural and social norms about health by women's personalities are also an influence on the number of women interested in the health field. Florence Nightingale as one of the wartime nursing figures was influential in the formation of the Red Cross with women as members (WHO, 2019). More than half of RCY members have a girlfriend/boyfriend. In middle adolescence, usually adolescents start to fall in love with the opposite sex (Angrist et al., 2019). Adolescents are always at high risk because they have short relationships and multiple partners, or boyfriend/girlfriend or fiancés with risky behavior. HIV transmission is considered one of them because of the lack of knowledge related to HIV/AIDS among adolescents (Wilkins et al., 2022). In research by Putra et al. (2017) one of the factors that influence sexual behavior in adolescents who are dating is a lack of knowledge. Most respondents have never participated in HIV socialization. This is because government programs and external school institutions related to HIV socialization are only held once a year and only representatives follow the counseling. The

majority of RCY members get information or knowledge from RCY teachers and coaches who routinely conduct material briefings once a week.

Knowledge is the result of knowing after people have sensed a certain object, namely through the senses of sight, hearing, smell, touch, and taste. Most human knowledge is obtained through education, experience of oneself and others, and the environment. (Darsini et al., 2019). In this study, the level of knowledge is all information known or realized by RCY members about HIV. Respondents who have a good level of knowledge or have correct answers above 12 out of 18 questions can be used as the beginning of a change agent or cadre for their friends, especially those who do not participate in RCY organizations and do not understand HIV, by telling them accurate knowledge about HIV (PMI, 2023). The absence of a PIK-R organization at SMAN 1 Parigi impacts the organization's role as a peer educator in terms of reproductive health including HIV. RCY members' knowledge about HIV is important in carrying out their duties in teaching others (peer educators). The level of knowledge of RCY members about HIV at SMAN 1 Parigi Pangandaran Regency was mostly (40.8%) had a high level of knowledge, and as many as 37.5% had sufficient knowledge. Although the results of this study indicate that most respondents have high level of knowledge, this still needs to be considered and get special attention to respondents who have a level of knowledge that is low as much as 21.7%. This shows the need to improve HIV education programs.

The results of this study are by the research conducted by Lestari et al. (2022) where respondents have high level of knowledge about HIV as member of PKPR. The results of other studies show that 59% of respondents have good knowledge, 41% are knowledgeable enough and as many as 0% of respondents have less knowledge. (Prasetiana, 2023). Some other studies that show positive results regarding knowledge about HIV are research by Azizah (2019) showed that 73.2% of respondents had good knowledge about HIV prevention, 64.7% of respondents had a positive attitude about HIV prevention, and 51% of respondents had HIV prevention behavior. The results of this study are by Lawrence Green's theory which states that knowledge will affect attitudes and attitudes will affect behavior. (Green, 1980). The results showed a high level of knowledge due to the similarity of often receiving information about HIV either from school, or through counseling/training, and respondents who have a high level of knowledge because of their duties as HIV cadres, namely as members of PIK-R, PKPR, and as members of RCY. The results showed that 53.3% of RCY members get the most frequent source of information about HIV from teachers or RCY coaches. This routine provision of education makes the factor of participation in HIV socialization and also the factor of having a girlfriend does not affect the level of knowledge of respondents.

In a study of one of the schools in Pangandaran Regency, it was stated that (71.6%) of students had a lack of knowledge. (Yani et al., 2022). In research Putri et al. (2021) most respondents were less knowledgeable as many as 66 respondents (41%), 52 respondents have enough knowledge (32.3%), and good level of knowledge 43 respondents (26.7%). A total of 51.76% of respondents were less knowledgeable (Mardiyah et al., 2019). The above study used student respondents in general. This study obtained higher and better results compared to the above studies. The results showed that most respondents had a high level of knowledge influenced by several factors. RCY members before being inaugurated are given material about kepalang merahan routinely every week by RCY seniors, alumni, and RCY coaches themselves. RCY members receive material by the RCY curriculum which also discusses HIV/AIDS. RCY members also gained knowledge about HIV from the teaching and learning

process in biology subjects, especially in the eleventh grade. Some counseling is also conducted by the health center and counseling from other external parties that are routinely held every year regarding HIV/AIDS. The results of this study were also influenced by the majority of RCY members who came from science majors. Students in science majors tend to have a better level of knowledge because the science curriculum includes fields such as biology and chemistry that are relevant to discussing viruses, disease transmission, and prevention strategies. Learning methods that emphasize the scientific method and the use of laboratories and practicums make students with science majors more open to health information. (Mentari et al., 2018).

The level of knowledge of RCY members, which is mostly high, will not necessarily have an impact on good HIV prevention behavior as well. In the theory of L. Green (1980), knowledge will affect attitudes, then attitudes will affect behavior. The Theory of Planned Behavior has 3 independent variables, First is the attitude towards behavior where a person assesses something beneficial and unfavorable. Second which social factor called subjective norms, it refers to perceived social pressure. The third is behavioral control, which is an individual's perception of the ease or difficulty of performing certain behaviors which refers to the beliefs a person has in performing a behavior. (Ajzen, 1991). Based on the results of the study, it was found that the health education program aimed at RCY members at SMAN 1 Parigi could increase RCY members' knowledge about HIV even though they had never attended HIV-related socialization or counseling. Nursing can play a role in raising awareness about the importance of HIV prevention which can be done through regular health education counseling. Nursing should develop educational materials that are appropriate to the level of understanding and RCY members as well as educational media and strategies to make it more interesting and easy to understand.

## **CONCLUSION**

Based on the results of the study, the level of knowledge of RCY members about HIV at SMAN 1 Parigi, Pangandaran Regency, is included in the category of high level knowledge. Although in some aspects of knowledge about HIV testing and HIV transmission, most RCY members still have incorrect knowledge. In this study, it is known that HIV-related counseling/socialization has not been intensively implemented. The results of this study can be used practically by the nursing profession and local governments such as the Health Office and Puskesmas to design promotive programs to increase adolescent knowledge about HIV which is expected to reduce the spread of HIV.

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